

Listeriosis

Agent: *Listeria monocytogenes* (bacteria)

Mode of Transmission: Ingestion of contaminated foods or beverages (e.g., sprouts, soft cheese, unpasteurized milk). Transmission can also occur from mother to fetus if the mother consumes a contaminated food item/beverage during pregnancy.

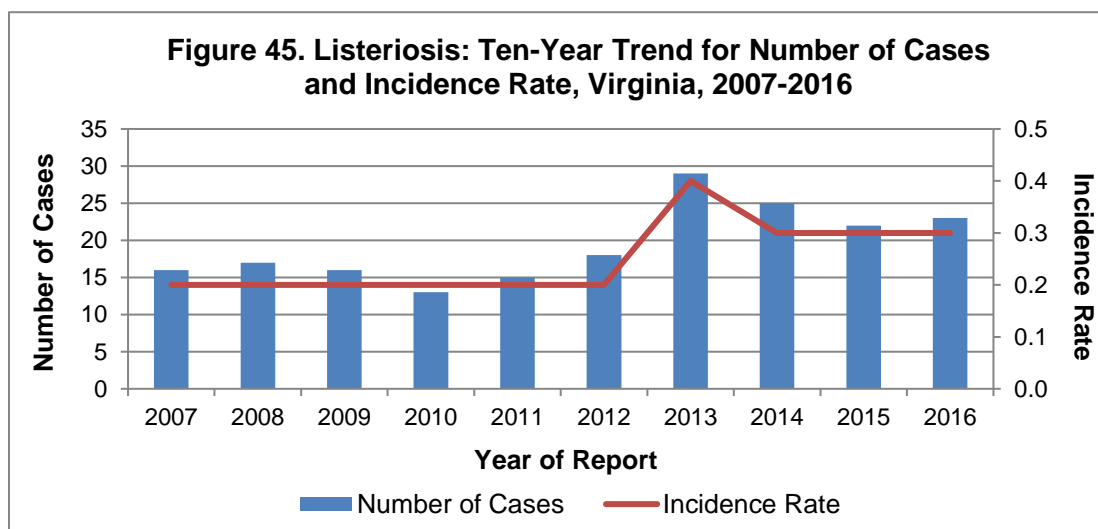
Signs/Symptoms: Typically fever, headache, muscle aches, and sometimes gastrointestinal symptoms, such as nausea, diarrhea, and vomiting. Infection can lead to serious disease, including shock and inflammation of the brain and the fluid surrounding the brain and spinal cord (i.e., meningitis). Among infected pregnant women, miscarriage, stillbirth, premature delivery, or neonatal infection may occur.

Prevention: Preventive measures include safe food preparation (e.g., thoroughly cooking or reheating food from animal sources and washing raw fruits and vegetables) and avoiding raw (unpasteurized) milk and milk products. Persons at higher risk for disease should avoid soft cheeses (unless labeled as made with pasteurized milk), refrigerated smoked seafood (unless contained in a cooked dish), and hot dogs and other deli/luncheon meats (unless heated until steaming hot just before serving).

Other Important Information: Persons at higher risk include pregnant women and their unborn babies and newborns, older adults, and persons with weakened immune systems.

Listeriosis: 2016 Data Summary	
Number of Cases:	23
5-Year Average Number of Cases:	21.8
% Change from 5-Year Average:	+6%
Incidence Rate per 100,000:	0.3

Twenty-three cases of listeriosis were reported in Virginia during 2016. This is similar to the 22 cases reported in 2015 and the 5-year average of 21.8 cases per year. The statewide incidence rate was 0.3 cases per 100,000, which remained unchanged from 2015 (Figure 45). Incidence rates in Virginia are similar to rates observed nationally, with a U.S. rate of 0.2 cases per 100,000 reported by CDC in 2015.



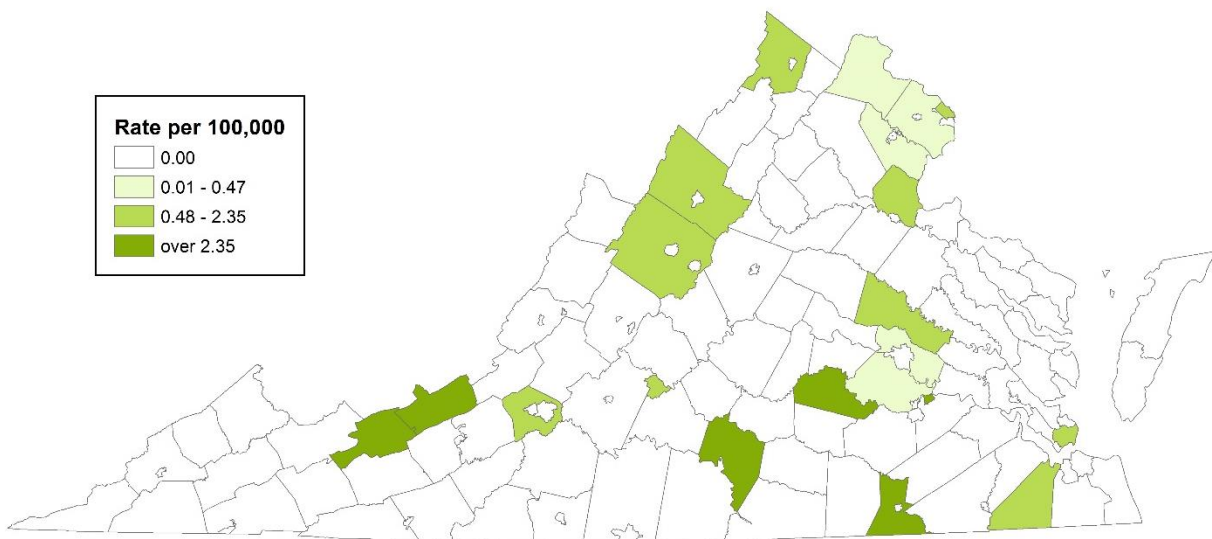
Consistent with the national trend, the 60 year and older age group had the highest number of listeriosis cases reported in 2016, with 14 cases and an incidence rate of 0.8 per 100,000. While one case was reported among children less than one year of age, no cases were reported in children one to 19 years of age. The remaining age groups had between one and four cases each.

Race information was not reported for 17% of cases. Among those with a known race, incidence was highest in the “other” race population with a rate of 0.5 per 100,000. Rates among the white and black populations were similar (0.2 and 0.1 per 100,000, respectively). Rates among females and males were also similar, with 0.3 per 100,000 each, respectively.

Geographically, the central region had the highest incidence rate at 0.5 per 100,000. The remaining regions had similar rates, ranging from 0.1 to 0.3 per 100,000. Incidence rates by locality can be viewed in the map below. Although cases occurred throughout the year, 74% of cases had onset during the spring and summer months of 2016.

During 2016, 91% of cases required hospitalization emphasizing the seriousness of the condition. One infant case was associated with pregnancy in 2016, and another case occurred in a pregnant female.ⁱ Two deaths were attributed to listeriosis, both occurring in adult females.

Listeriosis Incidence Rate by Locality Virginia, 2016



ⁱ Per case definitions established by the Council of State and Territorial Epidemiologists, confirmed listeriosis cases must be positive for *Listeria monocytogenes* by laboratory testing. The lab specimen from the infant was positive for *Listeria monocytogenes* yet the mother did not experience illness. Presumably the infection in the infant resulted from a contaminated food or beverage item the mother consumed. The pregnant woman who tested positive for *Listeria monocytogenes*, delivered a healthy infant with no complications.